
The potential difference

Specialised services for all
Electrical Infrastructure.





Capability

What we do

Our multi-skilled company provides specialised electrical services for Low and High Voltage equipment. We provide services to the power sector throughout Australia in all situations, whether it be generation, transmission, distribution, industrial and commercial.

STE Solutions is a company that is focused on providing outcomes to its clients that meet, and often exceed expectations as well as being delivered on time and within budget.

The specialist services offered include, but are not limited to:

- » Installation and Commissioning of High and Low Voltage plant and equipment
- » Underground Residential Developments
- » Inspections, Maintenance and Condition Monitoring of Electrical Plant and Equipment
- » Installation, Testing and Commissioning of Protection, Control & SCADA Systems
- » High Voltage Testing
- » Site Acceptance Testing
- » MV & HV Cable Installation, Testing (TD, PD, VLF), Fault Finding and Repairs
- » Project and construction management

For all Electrical applications from generation to commercial end users.

'The Potential Difference'

STE Solutions is an endorsed company with all of the principal asset owners in the Generation, Transmission and Distribution Sectors of the power industry.

Our team is comprised of highly skilled electricians with experience in all aspects of the electrical industry. Our combined expertise encompasses all areas of construction, installation, maintenance, commissioning and testing of electrical plant and equipment.

We are a South Australian owned and operated business with the flexibility and capability to provide services anywhere in Australasia.

Whatever your electrical requirements may be, we can provide you with cost effective solutions.



Safety & the Environment

The STE way is the safe way

At STE Solutions we approach safety as a culture. Every employee within our company must view safety as an integral part of their everyday work environment. Our commitment is to provide accident-free work sites for all of our employees. STE Solutions recognises the importance of Occupational Health and Safety systems and undertake job safety analysis and hazard identification as a mandatory step prior to undertaking any work. Our reputation as a leader in the development of these systems is of the highest importance to our company—and it extends to those that work around us. In order to accomplish this goal, our commitment to safety goes well beyond compliance. This is complimented by our self-auditing and reporting processes.

With support from management, our comprehensive safety and health program includes manuals, written policies and procedures, pre-employment screening, training and pre-job evaluations. All trades people are trained to participate in job safety and environment analysis development and conduct hazard identification checks. Our belief is that all accidents are preventable, and our commitment is if a work task cannot be performed safely, we will not perform that task.

Our environmental policy and associated procedures ensure that our activities do not adversely affect the environment. We strictly adhere to all client policies and provide Environmental Management Plans for managing projects with sensitive environmental issues.

STE Solutions understands the critical nature of your organisation's electrical assets. You need electrical equipment to be safe and reliable with minimal downtime. We have an excellent track record providing key services to major organisations such as ElectraNet, SA Water, Consolidated Power Projects, First Solar (Australia), CWP Renewables, Energy Australia, GE Power, Pacific Hydro and Power and Water (NT). With extensive experience working on crucial equipment, you can rest assured your organisation's electrical equipment is in safe hands.

STE Solutions is committed to developing solid, long-term client relationships. We can provide you with a dedicated account manager who will be your point of contact for all your requirements.

Services



We understand that High Voltage equipment is an expensive and crucial requirement for your organisation. We can provide highly skilled and experienced electricians, along with state of the art test equipment to ensure that your High Voltage equipment is functioning correctly, in good condition and safe to be placed in service. Our Electricians will ensure this is done safely, within time constraints and provide professional test reports for all works completed. STE Solutions are well equipped to provide the following services:

- » Complete substation installation including civil works, earth grid installation, primary plant erection and secondary systems installation
- » Subdivision installation of HV cable, LV cable, transformers, conduits and street lighting
- » Maintenance and testing of HV and LV switchboards and switchgear (indoor and outdoor)
- » High Voltage testing of primary plant using the latest test equipment
- » Installation of indoor and outdoor HV and LV Equipment
- » HV and LV protection testing and commissioning
- » Supervisory Control and Data Acquisition (SCADA) system commissioning
- » High Voltage transformer maintenance, with experience in larger units up to 500MVA
- » Cable integrity testing and repair work up to 33kv
- » High Voltage switching with national accreditation
- » Scheduled and unscheduled maintenance and inspections of electrical assets
- » Development of maintenance procedures and plans
- » Emergency response and repairs
- » Preventative maintenance scheduling and planning.



Field Services

Our Field Services team can respond to your every need when it comes to the installation, testing, maintenance and repair of all electrical equipment and cables. We operate Australia wide including remote locations to service all your electrical requirements. Whatever industry you're in—commercial, industrial, power infrastructure or green energy—we have the capabilities and solutions.

STE Solutions has a team of experienced electricians and technicians that are supplied with the correct equipment, vehicles, plant and business systems. Our team continually participates in ongoing training. We also have the capability of providing additional engineering and technical support where required.

With many years of experience, we know how to get your job done right.

Some of our key capabilities are, but not limited to, the installation, maintenance and testing of:

- » Power transformers of any size
- » High and Low Voltage circuit breakers
- » Current and voltage transformers
- » Isolators and earth switches
- » Ring main units
- » Substation maintenance and property management
- » Earth grid installation, repairs and testing
- » High Voltage switching, planning and co-ordination
- » Wind farm maintenance
- » High Voltage cable installation and repairs
- » Low Voltage cable installation and repairs
- » Lightning protection
- » Oil sampling
- » Protection relay installation, commissioning and testing
- » Generator maintenance
- » Scheduling and planning of maintenance programs
- » Thermographic imaging of all electrical equipment
- » Energy and asset auditing (Power Factor Correction Units)
- » General electrical installations and repairs
- » Electrical Appliance Legislative testing and tagging.



Our ever growing client base includes ElectraNet, Consolidated Power Projects, SA Water, Telstra, Energy Australia, GE Power & Water, CWP Renewables, Goldwind Australia, Suzlon Australia and Elecnor.

Services

Commissioning Services

Our commissioning team has the knowledge and capability to install and test a large variety of Low and High Voltage plant and protection systems. All testing is backed up by extensive reports on your equipment, giving you peace of mind that your High Voltage electrical assets are securely protected should a fault occur, while minimising any possible disruption to your supply. At STE solutions we can provide all your commissioning needs, and our capabilities include:

Commissioning and testing of primary plant, such as:

- » Circuit breakers (including timing tests)
- » Current transformers
- » Voltage transformers
- » Transformers and transformer guards
- » Disconnectors
- » Earthing switches
- » Insulation quality assessment (Tan Delta testing)
- » Primary current injection testing (Up to 800AAC)
- » Sweep frequency response analysis tests

Protection Relay testing using Omicron 3 phase test injection set including:

- » Distance protection
- » Differential protection
- » Overcurrent protection
- » Earth fault (residual) protection
- » Generator protection
- » Motor protection
- » Trip logic testing

Commissioning and testing of secondary systems including:

- » Protection schemes using Tele-protection
- » SCADA and RTU (Bay Controller) systems
- » Condition monitoring equipment
- » Wiring systems including insulation resistance testing and point to point checks
- » AC and DC supply systems including backup power supplies.



Electrical Engineering Services

Our electrical engineering services team can look at things with a wider perspective. Taking an overall view of your HV and LV electrical assets, we can provide recommendations on everything from protection systems and grading, to expected life spans of equipment, maintenance requirements, project management and support. Our capabilities include:

- » HV and LV electrical power system design verification
- » High level power system reviews for existing installations
- » Protection grading audits
- » Energy usage and efficiency audits
- » Condition assessment of aging assets to determine expected lifetime and maintenance requirements
- » Project management for an entire project or project manager support
- » Construction management from simple to complex projects
- » Site supervision of projects, short or long term
- » Safety observer within substations (level 3).



Underground Residential Developments (URD)

The STE Solutions dedicated team of highly experienced installers has the capability to manage all facets of the installation, testing and commissioning of URD projects of any size.

The team specialises in HV reticulation, transformer installation and testing, RMU installation and testing, street lighting, maintenance of the assets, South Australian Power Networks compliance approvals and connection to their grid.

The capabilities of this team are:

- » 7.6kV – 33kV High Voltage Installations
- » Low Voltage Installations
- » Street Lighting
- » Underground Pit & Pipe Installations
- » Community Title Projects.



*Experience
The
Potential
Difference*



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